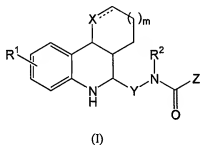


**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

**1. (currently amended):** A tetrahydroquinoline derivative represented by the following formula (I) or pharmacologically acceptable salts thereof:



wherein R<sup>1</sup> represents ~~a nitro group or a cyano group~~;

X represents CH ~~or O~~, provided that when X is CH, the dashed line represents a double bond;

m represents 0 ~~or 1~~;

Y represents ~~an alkylene group having 1-5 carbon atoms which may be substituted by a substituent selected from the group consisting of an alkyl group having 1-5 carbon atoms and a cycloalkyl group having 3-7 carbon atoms~~ -C(CH<sub>3</sub>)<sub>2</sub>-CH<sub>2</sub>-;

R<sup>2</sup> represents a hydrogen atom, ~~an alkyl group having 1-5 carbon atoms, a cycloalkyl group having 3-7 carbon atoms or an aralkyl group having 7-9 carbon atoms~~;

Z represents ~~B-O-Q~~

~~[wherein B represents an alkylene group having 1-5 carbon atoms which may be substituted by a substituent selected from the group consisting of an alkyl group having 1-5~~

carbon atoms and a cycloalkyl group having 3-7 carbon atoms; Q is a hydrogen atom, an alkyl group having 1-5 carbon atoms or a cycloalkyl group having 3-7 carbon atoms which may be substituted by a substituent selected from the group consisting of a halogen atom, a hydroxyl group, a cyano group and an alkoxy group having 1-5 carbon atoms, or an aryl group, a heteroaryl group or an aralkyl group having 7-9 carbon atoms which may have a substituent  $R^3$ ,

Z represents a heteroaryl group which may be substituted by 1-3 independent  $R^{11}$ 's, wherein the  $R^{11}$ 's independently have the same meaning as  $R^3$ .

$R^3$  represents an alkyl group having 1-5 carbon atoms which may be substituted by a fluorine atom, a halogen atom, an aryl group, a heteroaryl group, a nitro group, a cyano group, -A- $R^4$  {wherein A represents -CO-, -CO<sub>2</sub>-, -COS-, -CONR<sup>5</sup>-, -O-, -OCO-, -OSO<sub>2</sub>-, -S-, SCO-, -SO-, -SO<sub>2</sub>-, -NR<sup>5</sup>-, -NR<sup>5</sup>CO-, -NR<sup>5</sup>SO<sub>2</sub>-, -NR<sup>5</sup>CONH-, NR<sup>5</sup>CSNH- or -NR<sup>5</sup>COO- (wherein  $R^5$  represents a hydrogen atom, an alkyl group having 1-5 carbon atoms, a cycloalkyl group having 3-7 carbon atoms or an aralkyl group having 7-9 carbon atoms),

$R^4$  is a hydrogen atom, an alkyl group having 1-5 carbon atoms which may be substituted by a fluorine atom, a cycloalkyl group having 3-7 carbon atoms, a halogen atom, or an aryl group or a heteroaryl group which may be substituted by  $R^6$  (wherein  $R^6$  represents an alkyl group having 1-5 carbon atoms, an alkoxy group having 1-5 carbon atoms or a halogen atom), provided that when A is -NR<sup>5</sup>- or -CONR<sup>5</sup>-,  $R^4$  and  $R^5$  may, together with the nitrogen atom to which they are bonded, form pyrrolidine or piperidine), or -A'-(CH<sub>2</sub>)<sub>n</sub>- $R^{4'}$  {wherein A' represents a single bond, -CO-, -CO<sub>2</sub>-, -COS-, -CONR<sup>5'</sup>-, -O-, -OCO-, -OSO<sub>2</sub>-, -S-, SCO-, -SO-, -SO<sub>2</sub>-, -NR<sup>5'</sup>-, -NR<sup>5'</sup>CO-, -NR<sup>5'</sup>SO<sub>2</sub>-, -NR<sup>5'</sup>CONH-, NR<sup>5'</sup>CSNH- or -NR<sup>5'</sup>COO- (wherein  $R^5$  represents a hydrogen atom, an alkyl group having 1-5 carbon atoms, a cycloalkyl group having 3-7 carbon atoms or an aralkyl group having 7-9 carbon atoms), n represents an integer of 1 or

2, R<sup>4i</sup> represents a hydrogen atom, an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a cycloalkyl group having 3 - 7 carbon atoms, a halogen atom, a hydroxyl group, a cyano group, an alkoxy group having 1 - 5 carbon atoms, an alkylacyloxy group having 2 - 5 carbon atoms, an alkoxycarbonyl group having 2 - 5 carbon atoms, an aryl group or a heteroaryl group which may be substituted by R<sup>6i</sup> (wherein R<sup>6i</sup> represents an alkyl group having 1 - 5 carbon atoms, an alkoxy group having 1 - 5 carbon atoms or a halogen atom), or -NR<sup>7i</sup>R<sup>8i</sup> (wherein R<sup>7i</sup> and R<sup>8i</sup> each independently have the same meaning as the aforementioned R<sup>5i</sup>, provided that R<sup>7i</sup> and R<sup>8i</sup> may, together with the nitrogen atom to which they are bonded, form pyrrolidine or piperidine), provided that when A' is -NR<sup>5i</sup>- or -CONR<sup>5i</sup>-, R<sup>4i</sup> and R<sup>5i</sup> may, together with the -N-(CH<sub>2</sub>)<sub>n</sub>- to which they are bonded, form pyrrolidine or piperidine}], or alternatively Z represents -(CH<sub>2</sub>)<sub>n</sub>-W

{wherein ~~r~~ represents an integer of 0 - 2, W represents

~~a phenyl group having substituent R<sup>9</sup> at p-position, a naphthyl group which may have substituent R<sup>10</sup> or a heteroaryl group which may be substituted by 1-3 independent R<sup>11s</sup> (wherein R<sup>9</sup>, R<sup>10</sup> and R<sup>11</sup> independently have the same meaning as the aforementioned R<sup>3</sup>)}~~.

**2. (canceled).**

**3. (currently amended):** The tetrahydroquinoline derivative according to claim 1, where Y is -CH(CH<sub>3</sub>)-CH<sub>2</sub>- or -C(CH<sub>3</sub>)<sub>2</sub>-CH<sub>2</sub>-, m is 0, R<sup>2</sup> is a hydrogen atom and Z is -W {wherein W is a heteroaryl group which may be substituted by 1-3 independent R<sup>11s</sup> or a phenyl group having substituent R<sup>9</sup> at p-position {wherein R<sup>11s</sup> and R<sup>9</sup> independently represent a halogen atom, an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine

atom, a nitro group, a cyano group,  $-A-R^4$  (wherein A is  $-\text{CO}-$ ,  $-\text{CO}_2-$ ,  $-\text{O}-$ ,  $-\text{NHCO}-$  or  $-\text{NHCONH}-$ , and  $R^4$  is a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom) or  $-A'-(\text{CH}_2)_n-R^{4'}$  (wherein A' is  $-\text{CO}-$ ,  $-\text{CO}_2-$ ,  $-\text{O}-$ ,  $-\text{NHCO}-$  or  $-\text{NHCONH}-$ ,  $R^{4'}$  is a hydrogen atom, an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a hydroxyl group, a halogen atom or an alkoxy group having 1 - 5 carbon atoms, and n is an integer of 1 or 2)) or pharmacologically acceptable salts thereof.

**4. (currently amended):** The tetrahydroquinoline derivative according to claim 3, where Z is ~~a phenyl group having substituent  $R^9$  at p-position~~ or a heteroaryl group having substituent  $R^{11}$  {wherein  $R^9$  and  $R^{11}$  independently represents a halogen atom,  $-\text{OR}^4$  or  $-\text{NHCO}-R^4$  (wherein  $R^4$  represents a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom))} or pharmacologically acceptable salts thereof.

**5. (currently amended):** The tetrahydroquinoline derivative according to claim 3, where Z is ~~a phenyl group having substituent  $R^9$  at p-position~~ or a heteroaryl group having substituent  $R^{11}$  {wherein  $R^9$  and  $R^{11}$  represents  $-\text{NHCO}-R^4$  (wherein  $R^4$  represents a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom))} or pharmacologically acceptable salts thereof.

**6. (currently amended):** The tetrahydroquinoline derivative or pharmacologically acceptable salts thereof according to any one of claims 1 and 3 to 5 and a pharmaceutically acceptable carrier or excipient.

**7. - 10. (canceled).**

**11. (previously presented):** A method of treating muscle wasting or osteoporosis, which comprises administering to a mammal in need of such treatment, the tetrahydroquinoline derivative or pharmacologically acceptable salts thereof according to any one of claims 1 and 3 to 5 in an amount effective to treat said diseases.

**12. (previously presented):** A method of treating male hypogonadism, , which comprises administering to a mammal in need of such treatment, the tetrahydroquinoline derivative or pharmacologically acceptable salts thereof according to any one of claims 1 and 3 to 5 in an amount effective to treat said disease.

**13. (canceled).**